

ANNUAL REPORT

ON THE

HEALTH

OF THE

SWINTON (Yorks.) URBAN DISTRICT.

1900.

EDGAR ENGLISH, M.D., D.P.H.,

MEDICAL OFFICER OF HEALTH.

Doncaster :

DALE AND CO., PRINTERS AND BOOKBINDERS, CLEVELAND STREET.

1901.

1900.

Area: 1,700 Acres; Divided into Swinton and Kilnhurst.

Height above Sea Level: Sewage Works Outfall 50ft.

Small Pox Hospital 300ft.

Population: Census 1891, 9677; Estimated Population 1900, 12084.

Number of New Dwellings Certified as fit for habitation, 42.

Vital Statistics: Birth Rate per 1000, 38·2.

Death Rate ,, 19·5.

Zymotic Death Rate 3·2.

Infantile Mortality, 173 per 1000 Births.

Hospitals: Temporary Small Pox.

Joint Hospital in course of erection.

Water Supply: Sources (1) Wells and Headings in Oaks Rock;

(2) Borehole; (3) Foster's Spring.

Nuisances Reported: 152.

Nuisances Abated: 128.

Swinton Urban District Council.

MEDICAL OFFICER'S ANNUAL REPORT.

To the Chairman and Members of the Council.

GENTLEMEN,—

I beg herewith to submit my Annual Report on the health of your district for the year ending December 31st, 1900.

During the year progress has been made in Sanitary matters in several directions. New Byelaws—including New Streets and Buildings, Slaughterhouses, Houses Let in Lodgings have been adopted and sanctioned; also, regulations under the Dairies, Cowsheds and Milkshops Order. Scavenging is no longer let to Contractors. The number of water-closets is slowly increasing, and privy-middens improving, these and other sanitary steps noticed in the report cannot fail to lessen the death and sick rates of preventible filth diseases.

As to infectious diseases I have paid particular attention to Diphtheria, as it has for some years obtained an undesirable hold in your district. Typhoid

has not been quite so rife as during some years, but this disease, as well as infantile diarrhoea will remain with us until vast improvements are made in court-yards ; also, in making up and keeping clean undedicated and back roads.

The most important guide to the state of health of a district and the least liable to error of all vital statistics is the infantile death rate, this is, I am pleased to say, somewhat below the average.

Perfect sanitation is impossible without an abundant water supply ; it is therefore much to be regretted that the effort made during the year to obtain the much desired quantity has not been crowned with success.

Your Medical Officer's Records only go back to 1876, yet it is as well to review the sanitary condition of your district during, if only the last quarter of the Century just closed. I have attempted to do this by means of a Table from which I think several useful lessons may be gathered.

I have pleasure in stating that I have always received every assistance from my fellow-officers.

The Population estimated according to the Registrar-General's method to the middle of last year is 12084; this estimate is probably below the true population by several hundreds; the number of new houses built during the last few years signifies an abnormal increase of population.

Births registered during the year numbered 462—338 in Swinton and 124 in Kilnhurst—of these 14 were illegitimate. The birth rate was 38·2 per 1000 of the population. The average birth rate for the last 10 years has been 40·5.

Deaths. The number registered for all causes was 236, of these 172 took place in Swinton and 64 in Kilnhurst. The death rate being 19·5 per 1000 of the estimated population. This rate is, rather above the mean rate for the preceding ten years. Too much stress must not, however, be put on this rate, as several errors vitiate the statistics, for instance the population in 1900 was estimated after the usual manner at 11,278, and the death rate was given at 16·94 per 1,000; whereas the true population was 9,500; and the death rate 20·0 per 1,000.

Infant Mortality. Eighty infants under twelve months of age died during the year, the rate being 173 per 1,000 of the infants born during the year. The rate for 1899 was 197 per 1,000. The sanitary condition of a district may be fairly accurately measured by this death rate, in mining districts it is usually high, especially where, as in yours, the population is rapidly increasing.

The rate for the 33 great towns of England and Wales was 172 per 1,000, or about the same as your own. It is surprising that in a thriving district such as yours with only about eight persons to the acre, the infants have not a better chance of surviving their first year than in the densely populated largest towns where the greater number of infants are born under apparently less advantageous circumstances than your own.

More cleanliness about houses, especially in the low lying portions of the district is required in order to lower this death rate.

All houses should have some kind of impervious pavement in their close proximity, and if the rest of the yards are not thus paved, I would recommend their surfaces be scraped and covered with clean cinders twice yearly.

It is in the power of the cottage builder to lessen the infant sufferings by introducing, however small, a well placed and well ventilated pantry. I would also recommend in the larger cottages an easily opened staircase window; I have seen these introduced into cottages by a speculative builder who makes ventilation a point. During the year leaflets, on the care and feeding of children, have been distributed by the Registrar of Births. Girls attending the senior classes at school should be well drilled in domestic hygiene. I hope the educationists within your district may consider this matter.

Zymotics. The death rate from the seven principal zymotics was 3·2 per thousand of the population, as against 3·9 last year. The deaths were as follows:

A. Principal Zymotics.

		Swinton.		Kilnhurst.		Totals.
	Small Pox	...	0	...	0	0
	Measles	...	6	...	13	19
	Scarlet Fever	...	6	...	0	6
	Diphtheria	...	7	...	1	8
	Whooping Cough		3	...	1	4
	Diarrhœa	...	6	...	1	7
Fever	{ Typhus	...	0	...	0	0
	{ Typhoid	...	1	...	0	1
	{ Simple continued		0	...	0	0

B. Minor Zymotics.

Influenza	...	3	...	1	...	4
Erysipelas	...	1	...	0	...	1
Puerperal Fever	...	1	...	0	...	1

Measles. This disease was prevalent, more especially in Kilnhurst during the first few weeks of the year. Eighteen out of the nineteen deaths took place in children under five years of age, the deaths being largely due to the want of, or insufficient treatment at the commencement of the illness. I prepared a leaflet on this disease and its prevention, which was freely distributed in the schools.

Measles cannot be looked upon as an unimportant disease when it produces more deaths than any other specific disease, and twice as many as from any other zymotic (see tables). The chief difficulties in connection with isolation and prevention of the spread are (1) the tender age of most of the patients, (2) the disease being infectious before it is usually recognised.

Scarlet Fever. The 149 reported cases occurred chiefly during the last half of the year. 130 of these patients were between one and fifteen years of age. Fortunately the death rate has not been high, being 4·6 per cent. of the cases. This disease has been more or less prevalent since 1888.

Diphtheria. Twenty-three cases were reported, of these 34 per cent. died, six of the deaths were under five years of age, but a number of the cases were of school age. The first cases were associated with an unhealthy yard, known as Oxley's, Walker street; the cases at the end of the year were connected with the National School, Swinton. The more recently built portions of your district have not escaped, but seem quite as liable to suffer as the old and dilapidated properties.

This disease is certainly not indigenous to the district, in fact, with a single exception, no mention whatever is made of such a complaint in any of your Medical Officers' Reports from 1876 to 1885. From 1885 to the present time some mention is made in every Annual Report, and on one or two occasions it has been so prevalent as to call for a special report. Increased knowledge seems to bring forth increased number of cases.

Whether the diphtheria bacillus existed in the soil or elsewhere outside the human body previous to 1885 it is impossible to say, but the direct cause at present is by personal infection, and the indirect causes are certain insanitary conditions, namely, (1) overcrowding, (2) dampness of houses, and a (3rd) probable cause has more than once been pointed out to you, namely, the want of sufficient ventilation in certain sewers, more especially those with dead-ends.

The means for preventing the spread of diphtheria are :—

1. Hospital or strict home isolation.
2. The bacteriological examination of suspicious and mild cases for the purpose of more exact diagnosis.
3. Great attention paid to all persons' throats who are in attendance on or in close contact with cases of this disease.

Typhoid. Six cases were reported causing one death at Roman Terrace ; one case occurred in Kilnhurst, and the remainder were scattered in Swinton.

The Roman Terrace case was long continued and severe. Fearing such a case might be the cause of others, even months afterwards, I ordered the bed to be burned, and particular attention was paid to the disinfecting of privy, backyard, &c. The pail is used in all reported Typhoid cases.

An exceptional heavy storm took place on the 4th of August, washing an immense quantity of filth into the river. I am inclined to think that nature, by this means, lowered the typhoid rate for the year.

Puerperal Fever. At least one death from this disease occurred during the year. Even after every care is taken as to personal cleanliness, a midwife or nurse should not visit another confinement, for at least 14 days after attending such a case.

Tubercular Diseases, The nine deaths from these diseases include seven from consumption or phthisis. The death rate from consumption is not high in your district, yet, by improved sanitary conditions in certain of the more crowded portions this rate would be still further lowered. I have, in a special report pointed out to you that one fifth of the total deaths from consumption during the last ten years have occurred in the small area around Bridge Street.

During the year I made the following recommendations for the prevention of these diseases, all of which you consented to carry out.

- (1) To invite medical practitioners to voluntarily notify cases of Consumption at the usual fees.
- (2) To superintend the cleansing and fumigation of houses where it seems advisable on account of the removal or death of cases of Phthisis.
- (3) The distribution of leaflets on the causes of these diseases.
- (4) The more strict control of milk supplies with the appointment of a veterinary surgeon.

Diarrhœa. Seven deaths from zymotic diarrhœa were registered. The majority of these cases are due to dirty houses and surroundings.

Cancer. This fatal disease still remains outside the class of preventible diseases.

Four deaths took place during the year, all of which were females.

Cancer Table for last 20 Years.

Total number of deaths	54
Average age at death	60 years

Parts effected.

Urinary and Generative Organs	17
Liver	9
Stomach and Bowels.....	6
Breast	4
Other parts or unspecified	18

Although several cases occurred in certain localities, it cannot be said that there are cancer houses. Neither is there any apparent increase in number of deaths during the last 10 years.

Coal miners are not particularly prone to cancer.

Note.—When studying cancer statistics, allow for removals to hospital and cancer age.

Small Pox Hospital. The last of the outbreak of 1899 was in hospital at the commencement of the year. Since the discharge of this patient your temporary hospital has not been required, although in a constant state of readiness.

Isolation Hospital. Progress has been made during the year for finding accommodation for infectious diseases. It is to be hoped the hospital, together with a steam disinfector of the latest pattern will, in a few months be ready for the reception of patients.

The benefits derived from these hospitals, are :—

- (1) Those that concern the Public Health by the prevention of the spread of disease and epidemics.

- (2) Those that more particularly concern the individual, such as the better nursing; saving of expense; reduction of numbers excluded from school.

Schools. School attendance is one of the chief causes of Scarlet Fever, having become almost endemic in your district of late years, and also for the frequent reappearance of diphtheria. Cloak rooms and closets should be frequently cleansed and disinfected as well as the schoolrooms whenever these diseases are amongst the pupils, and before children from an infected house return to school a certificate should be obtained from the Medical Officer of Health or Medical attendant.

Since the State has introduced compulsory education it is its duty to protect children from infectious diseases whilst attending school.

I find the Kilnhurst mixed National School is overcrowded and ventilation defective, calling for an immediate remedy.

Diseases of Occupations. The female portion of the population are chiefly occupied in their own domestic duties. A very few women and girls are employed in factories or workshops; it cannot, therefore, be said that the large infant mortality is due to maternal occupations. Coal mining is the occupation of the largest portion of the males; thanks to the excellent ventilation in the mines the miners have now a fairly healthy occupation.

Table of deaths amongst Coal Miners, 1890.

Mean age at death	48 years
Accidents	6
Bronchitis	2
Consumption	1
Typhoid	1
Diphtheria	1

Water Supply. The inefficient supply is prejudicial to the public health, more especially during the summer. Too much economy is used for public sanitary purposes such as watering the streets and flushing sewers. Also, for domestic purposes, the general introduction of water closets and baths cannot be strongly urged until a larger supply is obtained.

For many years you have supplemented your supply with the overflow from Foster's Spring. This source should be absolutely condemned, as it is very liable to pollution; although your officers keep a watchful eye on this spring knowing too well of the danger, yet nothing they can do will prevent a serious outbreak of Typhoid, or other filth disease should certain specific germs be washed into the spring and pass through your filter.

The great inconvenience experienced by the occupiers of houses in Rockingham Road on account of the extremely intermittent and irregular supply is, I believe, now under your consideration.

Administration of Cowsheds. Possibly no form of food requires more careful protection from germs of disease than milk. Further, wholesome milk cannot reasonably be expected to be drawn from unhealthy animals. In order, therefore, to protect the milk supplies produced in your district you have, on my recommendation, made regulations as empowered by Article 13 of the Dairy Cows and Milksheds Order, 1885. And also appointed a Veterinary Surgeon for the examination of animals in cases requiring skill and advice.

Unfortunately milk comes into your district from various outside, and often doubtful sources. And on the other hand some of the neighbouring districts benefit by your regulations; as for instance, every pint of milk from one of the farms in your district is sold beyond your borders. It is therefore obvious that such regulations as you have adopted should be made compulsory throughout the country.

Cowsheds.

Number of Registered Cowkeepers.....	18
Number of Sheds voluntarily closed	3
Number of Sheds absolutely condemned	1
Number of Sheds to be re-constructed or fewer animals kept	3
Number of well ventilated Sheds with head walk and food store combined	5

The cleansing of feeding troughs is apparently totally neglected. The upper portions of the Byres are also usually dusty and dirty.

Slaughter Houses and Meat. Although most of the butchers comply fairly well with your bye-laws, nearly all the 18 registered slaughter houses actually adjoin or are in close proximity to houses and stables. This is very undesirable for several reasons. Before registering another slaughter house I would recommend for your consideration the advisability of having your own slaughter house with good lairage accommodation and separate cooling room.

Your bye laws demand that all blood be collected and conveyed away in proper covered vessels, at least once every twenty-four hours. This is very important as nothing is more offensive than putrefying blood, and no blood should therefore be permitted to escape into the sewers. The free use of sawdust will help to prevent this.

No meat has been condemned in your district during the year. A public slaughter house would greatly facilitate the inspection of meat killed in the district.

Disposal of Solid Refuse. A portion of the contents of middens is still made use of by farmers, but there is not the same

demand for this kind of manure by agriculturists as in former days, therefore, until the Council can see their way to destroy this refuse by means of fire, it seems as if the present objectionable method of "tipping" within no great distance of houses is likely to be continued. The position of these tips is important; not only must water supplies be considered, but also dwellings and frequented roads and footpaths.

The tip at Kilnhurst is partially carefully covered over with clean earth but, nevertheless it is often a nuisance, and will for many years to come be a hidden danger.

This is the first year that your own staff have emptied middens and collected refuse; after a little experience and with good management this new department should so perform their work as to help to reduce the sick rates.

Conversion of Midden Privies into Water Closets.

There are several closed-in yards in your district where privy middens remain injuring health. This evil is intensified in some yards through back to back houses; some of the occupiers of these dwellings have opposite their only door and only window for the little room, which is washhouse, kitchen, nursery and sitting-room combined, a huge midden for several houses surrounded by privies and urinals; the careless occupiers of the houses throw into the midden anything and everything they wish to get rid of, and when removal of the filthy mass takes place the nuisance, always great, is greatly increased.

The only efficient remedy is to convert the privies into water closets, and every inducement should be held out to the owners to favour their general conversion.

Insanitary Area. I reported to you at one of the monthly meetings that the small but important area in and around Bridge Street, is responsible for one-fifth of the total number of deaths from Consumption; and one tenth of the total number of Zymotic deaths occurring in your district during the last ten years.

It is true some improvements have taken place lately, but until the midden privies are done away with, and the back yards and roads channelled and paved, preventible deaths will take place. I recommend portable ashbins within this area in place of middens. Also, during dry seasons the hose pipe be made use of wherever possible.

I have also drawn your attention to two other low-lying, unhealthy parts, consisting of back to back houses, namely—Little Britain, and North and South Terraces, Kilnhurst. It is seldom tenants of such properties make complaints, but the filth brought into their houses, due to the absence of pavement and ill drained and never properly cleansed yards, is their excuse for dirty houses.

Most of these back to back dwellers are in receipt of very good wages. They belong, however, to the careless, thriftless class, who neither valuing sunlight or fresh air, permit their health and will power to become stifled. Usually we find such persons agree with their landlords in the indifference shewn as regards sanitary duties due to their neighbours.

I am, Gentlemen,

Your obedient Servant,

EDGAR ENGLISH, M.D., D.P.H.

February 27th, 1901.

TABLE I.

SHEWING THE NUMBER OF REGISTERED CAUSES
OF DEATHS OCCURRING DURING 1900.

	All Ages.	Swinton.	Kilnhurst.
Small Pox	0	...	—
Measles	19	...	6
Scarlet Fever	6	...	6
Whooping Cough	4	...	3
Diphtheria	8	...	7
Typhoid	1	...	1
Epidemic Influenza	4	...	3
Diarrhœa	7	...	6
Puerperal Fever	1	...	1
Erysipelas	1	...	1
Phthisis	7	...	6
Other Tubercular Diseases	2	...	2
Cancer	4	...	3
Bronchitis	17	...	—
Pneumonia	13	...	—
Accidents	9	...	—
Suicides	1	...	—
All other causes	132	...	—

TABLE II.

SHEWING THE NUMBER OF INFECTIOUS DISEASES
NOTIFIED DURING THE YEAR 1900.

		At ages. Years.				
	At all Ages.	Under 1.	1 to 5.	5 to 15.	15 to 25.	25 and upw'ds.
Diphtheria ...	23	1	6	8	4	4
Membranous Croup ...	1	1	0	0	0	0
Erysipelas ...	15	0	1	1	0	13
Scarlet Fever ...	149	4	65	65	5	10
Enteric or Typhoid Fever	6	0	0	2	0	4
Puerperal Fever	1	0	0	0	0	1

TABLE III. From first appointment of Medical Officer of Health in rates of Phthisis or Consumption, Typhoid, and Infants under one year; these forms of diseases. The number of deaths from Diphtheria is also added

Population. Census 1841, 1593; Census 1851, 1817; Census 1861, 3189;

Population. Year,		Consumption or Phthisis.		Typhoid.		Infant deaths		Diphtheria.	
		Number of deaths.	Rate.	Number of deaths.	Rate.	Number of deaths.	Rate.	Number of deaths.	Rate.
1876	6983	10	1.4	1	0.2	49	120	0	0
1877		9		0	..	52	..	0	0
1878	7428	12	1.6	2	0.27	66	170	1	.13
1879		7	..	3	..	53	..	0	0
1880		14	..	3	..	60	..	0	0
1881	7700	18	2.3	6	0.78	44	124	0	0
1882		15	..	3	..	57	..	0	0
1883	8169	16	1.9	22	2.8	52	150	0	0
1884		8	..	0	0	61	..	0	0
1885	8986	15	1.7	0	0	72	200	0	0
1886		7	..	0	0	56	..	0	0
1887		11	1.09	1	..	59	169	1	..
1888		14	..	1	..	50	..	0	0
1889		12	..	0	0	60	151	0	0
1890		16	..	1	..	59	..	1	..
1891	9735	19	1.9	0	0	70	190	1	.1
1892		15	..	0	..	74	..	2	..
1893		7	..	0	..	68	..	8	..
1894	10462	9	0.8	0	0	60	148	9	0.8
1895		9	..	3	..	82	..	7	..
1896		10	..	1	..	80	..	1	..
1897			..	0	..	99	..	3	..
1898		10	..	5	..	79	..	0	..
1899		14	..	2	..	98	..	4	..
1900		7	..	1	..	80	..	8	..

1876 to end of the Century shewing the population, number of deaths and improved sanitary conditions are accompanied by diminished mortality from shewing increase death rate from this disease during the last decade.

Census 1871, 5150 ; 1086 Houses occupied ; 32 unoccupied ; 29 building.

{ Water supply inadequate. Efficient system of drainage for district recommended. Main sewer for Roman Terrace laid

Sewer laid in William Street. Census taken by Board.

{ 30 deaths from Scarlet Fever. Outbreak of Typhoid due to polluted wells.
{ Sewers laid in Bridge Street and Highbury.

Analysis proved many private wells to be contaminated with sewage.

Special Report on outbreak of Typhoid Fever. Disinfectants freely used. Excreta buried.

{ Special Report on outbreak of severe type of Scarlet Fever, 25 deaths. Well in Oaks Road sunk and oak Engine House built, one mile of Water Mains laid. Sewage Works with retaining sewer completed.

{ Special Report on severe and extensive outbreak of Typhoid due to private water supplies polluted with sewage. Progress made in laying water mains.

Not a single case of Typhoid reported. Water laid on throughout the district.

{ Portion of Rawmarsh district annexed. Not a single case of Typhoid reported.
{ A few cases of diphtheria.

A few cases of Typhoid. Four cases of Diphtheria reported.

{ Several cases of Diphtheria. Sewage Works completed. Also, sewerage of Piccadilly.

A few cases of Diphtheria sore throat. Only one case of Typhoid (fatal).

{ Limited supply of water in dry season. Recommended to search for additional supply.

{ 9 cases of Diphtheria. 9 Cases of Typhoid. Restricted supply of water overflow from Foster's Spring piped down to filter.

Anticipate water famine during dry seasons.

Diphtheria threatened to become epidemic.

35 Cases of Diphtheria, Wath Road and Bow Broom. Four cases of Typhoid.

{ 40 Cases of Diphtheria all in Swinton. 9 Cases of Typhoid due to polluted water.

Eight cases of Typhoid. Nine cases of Diphtheria.

48 Cases of Typhoid. Five cases of Diphtheria.

15 Cases of Typhoid. 18 Cases of Diphtheria. Bore hole put down.

